500.43868X00

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicants: S. NISHIYAMA, et al

Serial No.: 10/849,113

Filed: May 20, 2004

For: DISK ARRAY APPARATUS

PETITION TO MAKE SPECIAL
UNDER 37 CFR §1.102(MPEP §708.02)

MS Petition
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

September 15, 2005

Sir:

Applicants hereby petition the Commissioner to make the above-identified application special in accordance with 37 CFR §1.102(d). Pursuant to MPEP §708.02(VIII), Applicants state the following.

(A) This Petition is accompanied by the fee set forth in 37 CFR §1.17(h).

The Commissioner is hereby authorized to charge any additional payment due, or to credit any overpayment, to Deposit Account No. 50-1417.

(B) All claims are directed to a single invention.

If the Office determines that all claims are not directed to a single invention, Applicant will make an election without traverse as a prerequisite to the grant of special status in conformity with established telephone restriction practice.

(C) A pre-examination search has been conducted.

The search was directed towards a storage system. In particular, the search was directed towards a disk array apparatus comprising a plurality of disk drives for storing data; a plurality of logic boards for controlling the plurality of disk drives; a fan for generating a air flow to cool an interior of the apparatus; power supply equipment for supplying electric power to the disk drives, the logic boards, and the fan, the plurality of disk drives, the plurality of logic boards and the fan being mounted as component parts in a disk array casing, and the disk array apparatus being configured such that component parts can be added on in future and dummy parts are temporarily mounted in spaces for additional installation, wherein a storage section for storing the dummy parts, which are dismounted when component parts are added on, is provided in such a plane inside the disk array casing as to circumvent passages of cooling air flow and area through which the component parts are mounted or dismounted, the dummy parts are fixed to storage section with screws, the dummy parts are structured to have the screws mounted to both ends thereof under a condition that the screws are prevented from coming off, and the storage section is so structured as to have screw holes, into which screws engage, arranged at varied intervals so that a plurality of sizes of dummy parts can be fixed.

The search of the above features was conducted in the following areas:

Class	Subclasses
361	683, 685, 687, 724, 726
711	114

Additionally, a computer database search was conducted on the USPTO systems EAST and WEST.

(D) The following is a list of the references deemed most closely related to the subject matter encompassed by the claims:

U.S. Patent Number	Inventors
5,119,497	Freige et al
5,559,678	Fukuda et al
6,480,379 B1	Dickey et al

U.S. Patent Application Publication No.	Inventor(s)
2004/0196627 A1	Lohman

A copy of each of these references (as well as other references uncovered during the search) is enclosed in an accompanying IDS.

(E) It is submitted that the present invention is patentable over the references for the following reasons.

It is submitted that the cited references, whether taken individually or in combination with each other, fail to teach or suggest the invention as claimed. In particular, the cited references, at a minimum, fail to teach or suggest as recited in the claims:

a first feature of the present invention as recited in independent claims 1 and 17 of a storage section for storing the dummy parts, which are dismounted

when component parts are added on, is provided in such a place inside the disk array casing as to circumvent passages of cooling air flow and areas through which the component parts are mounted and dismounted; and

a second feature of the present invention as recited in independent claim 17 wherein the dummy parts are fixed to the storage section with screws, the dummy parts are so structured to have the screws mounted to both ends thereof under a condition that the screws are prevented from coming off, and the storage section is so structured as to have screw holes, into which the screws engage, arranged at varied intervals so that a plurality of sizes of dummy parts can be fixed.

Further, the cited references fail to teach or suggest the above noted features of the present invention when taken in combination with other limitations recited in the claims.

The references considered most closely related to the claimed invention are briefly discussed below:

Freige (U.S. Patent No. 5,119,497) provides an enclosure for computer control unit. Figures 4 and 5 show sliding disk drive cover D-C which can be used in disc array units, in the open and closed position. In the open position, the cover is retractably stored within casing, exposing the disc drives while in the closed position, the cover pivots downwards and covers the disc drives.

However, Freige does not teach or suggest the features of the present invention, including storing dummy parts inside the disk array casing using internal screws.

More particularly, Freige at a minimum does not teach or suggest the above described first feature of the present invention as recited in independent claims 1 and 17, and the above described second feature of the present invention as recited in independent claim 17, and further fail to teach or suggest these features of the present invention in combination with the other limitations recited in each of the independent claims.

Fukuda (U.S. Patent No. 5,559,678) provides for an electronic device housing. Figures 1 and 2 show electronic device housing 11 with dummy surface plate 17 pivotally mounted at the opening edge of rack 13 using helical spring 19. Dummy surface plate 17 is pivots on being pushed by electronic circuit package 12 when electronic circuit package 12 is inserted in the slot. When electronic circuit package 12 is removed from electronic device housing 11, spring 19 reversely pivots dummy surface plate 17 towards its original position.

However, Fukuda does not teach or suggest the features of the present invention, including the use of screws for storing disk array dummy parts inside the disk array casing.

More particularly, Fukuda at a minimum patent does not teach or suggest the above described first feature of the present invention as recited in independent claims 1 and 17, and the above described second feature of the present invention as recited in independent claim 17, and further fail to teach or suggest these features of the present invention in combination with the other limitations recited in each of the independent claims.

Dickey (U.S. Patent No. 6,480,379 B1) provides for a removable component filter. Figures 5 and 6 show a five-sided, injection molded, one piece hard disk drive filler which can be used in disk array apparatuses. The disk drive fillers have internal angles such that multiple disk drive fillers can be easily and compactly stacked together, or nested within each other, for storage and shipment.

However, Dickey does not teach or suggest the features of the present invention, including a storage section for storing disk array dummy parts inside the disc array casing using screws.

More particularly, Fukuda at a minimum does not teach or suggest the above described first feature of the present invention as recited in independent claims 1 and 17, and the above described second feature of the present invention as recited in independent claim 17, and further fail to teach or suggest these features of the present invention in combination with the other limitations recited in each of the independent claims.

Lohman (U.S. Patent Application Publication No. 2004/0196627 A1) provides for a housing for electronic circuits, electrically connecting element and contact spring, procedure for electromagnetic shielding. Figures 1 and 3 show dummy back plates 7 mounted on the inner side of frame part 5 and attached thereto by screws 9 passing through slots in upper bent portions 13 of plate 7.

However, Lohman does not teach or suggest the features of the present invention, including a storage section for storing disk array dummy parts.

More particularly, Lohman at a minimum does not teach or suggest the above described first feature of the present invention as recited in independent claims 1 and 17, and the above described second feature of the present invention as recited in independent claim 17, and further fail to teach or suggest these features of the present invention in combination with the other limitations recited in each of the independent claims.

Therefore, since the cited references at a minimum fail to teach or the above described first feature of the present invention as recited in independent claims 1, and 17, and the above described second feature of the present invention as recited in independent claim 17 and further fail to teach or suggest these features of the present invention in combination with the other limitations recited in each of the independent claims, it is submitted that all of the claims are patentable over the cited references whether said references are taken individually or in combination with each other.

(F) Conclusion

Applicant has conducted what it believes to be a reasonable search, but makes no representation that "better" or more relevant prior art does not exist. The United States Patent and Trademark Office is urged to conduct its own complete search of the prior art, and to thoroughly examine this application in view of the prior art cited herein and any other prior art that the United States Patent and Trademark Office may locate in its own independent search. Further, while Applicant has identified in good faith certain portions of each of the

references listed herein in order to provide the requisite detailed discussion of how the claimed subject matter is patentable over the references, the United States Patent and Trademark Office should not limit its review to the identified portions but rather, is urged to review and consider the entirety of each reference, and not to rely solely on the identified portions when examining this application.

In view of the foregoing, Applicant requests that this Petition to Make Special be granted and that the application undergo the accelerated examination procedure set forth in MPEP 708.02 VIII.

(G) Fee (37 C.F.R. 1.17(i))

The fee required by 37 C.F.R. § 1.17(i) is to be paid by:

[X] the Credit Card Payment Form (attached) for $130.00.

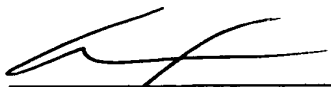
[ ] charging Account _____ the sum of $130.00.

A duplicate of this petition is attached.

Please charge any shortage in fees due in connection with the filing of this paper, including extension of time fees, or credit any overpayment of fees, to the deposit account of MATTINGLY, STANGER, MALUR & BRUNDIDGE, P.C., Deposit Account No. 50-1417 (500.43868X00).

Respectfully submitted,

MATTINGLY, STANGER, MALUR & BRUNDIDGE, P.C.



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PTO/SB/30 (11-04)
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Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

PETITION FEE
Under 37 CFR 1.17(f), (g) & (h)
TRANSMITTAL
(Fees are subject to annual revision)

Send completed form to: Commissioner for Patents
P.O. Box 1450, Alexandria, VA 22313-1450

Application Number	**10/849,113**
Filing Date	**May 20, 2004**
First Named Inventor	**S. NISHIYAMA, et al**
Art Unit	
Examiner Name	
Attorney Docket Number	**500.43868X00**

Enclosed is a petition filed under 37 CFR §1.17(h) that requires a processing fee (37 CFR 1.17(f), (g), or (h)). Payment of $ 130.00 is enclosed.

This form should be included with the above-mentioned petition and faxed or mailed to the Office using the appropriate Mail Stop (e.g., Mail Stop Petition), if applicable. For transmittal of processing fees under 37 CFR 1.17(i), see form PTO/SB/17i.

Payment of Fees (small entity amounts are NOT available for the petition (fees)

☒ The Commissioner is hereby authorized to charge the following fees to Deposit Account No. 50-1417:

☐ petition fee under 37 CFR 1.17(f), (g) or (h) ☒ any deficiency of fees and credit of any overpayments

Enclose a duplicative copy of this form for fee processing.

☐ Check in the amount of $ _____ is enclosed.

☒ Payment by credit card (From PTO-2038 or equivalent enclosed). Do not provide credit card information on this form.

Petition Fees under 37 CFR 1.17(f): Fee $400 Fee Code 1462

For petitions filed under:
§ 1.53(e) - to accord a filing date.
§ 1.57(a) - to according a filing date.
§ 1.182 – for decision on a question not specifically provided for.
§ 1.183 – to suspend the rules.
§ 1.378(e) for reconsideration of decision on petition refusing to accept delayed payment of maintenance fee in an expired patent.
§ 1.741(b) – to accord a filing date to an application under §1.740 for extension of a patent term.

Petition Fees under 37 CFR 1.17(g): Fee $200 Fee code 1463

For petitions filed under:
§1.12 - for access to an assignment record.
§1.14 - for access to an application.
§1.47 - for filing by other than all the inventors or a person not the inventor.
§1.59 - for expungement of information.
§1.103(a) - to suspend action in an application.
§1.136(b) - for review of a request for extension of time when the provisions of section 1.136(a) are not available.
§1.295 - for review of refusal to publish a statutory invention registration.
§1.296 - to withdraw a request for publication of a statutory invention registration filed on or after the date the notice of intent to publish issued.
§1.377 – for review of decision refusing to accept and record payment of a maintenance fee filed prior to expiration of a patent.
§1.550(c) – for patent owner requests for extension of time in ex parte reexamination proceedings.
§1.956 – for patent owner requests for extension of time in inter partes reexamination proceedings.
§ 5.12 – for expedited handling of a foreign filing license.
§ 5.15 – for changing the scope of a license.
§ 5.25 – for retroactive license.

Petition Fees under 37 CFR 1.17(h): Fee $130 Fee Code 1464

For petitions filed under:
§1.19(g) – to request documents in a form other than that provided in this part.
§1.84 – for accepting color drawings or photographs.
§1.91 – for entry of a model or exhibit.
§1.102(d) – to make an application special.
§1.138(c) – to expressly abandon an application to avoid publication.
§1.313 – to withdraw an application from issue.
§1.314 – to defer issuance of a patent.

Name (Print/Type)	**Carl I. Brundidge**	*Registration No. (Attorney/Agent)*	**29,621**
Signature		*Date*	September 15, 2005